AMENDMENTS TO THE CLAIMS

1. (currently amended) A device for electrical contacting or for the isolation of organic or inorganic semiconductors in electronic or optoelectric devices comprising

a substrate, either in the form of

a) a contact material consisting of an organic or inorganic electrical conductor, or

b) an isolating material consisting of an organic or inorganic dielectric; and

a patterned or unpatterned charge transfer material**, which is** on or at a surface of the substrate **and which forms a charge transfer complex with an organic or inorganic semiconductor,**

wherein the charge transfer material

a) comprises charge transfer components in the form of donors or acceptors,

b) forms a self-assembling layer of one or more atomic and/or molecular layers,

c) has a direct or indirect bond to the surface of the substrate, and

~~d) forms a charge transfer complex with an organic or inorganic semiconductor, wherein the charge transfer material~~

d) forms a donor **material in the charge transfer complex if the semiconductor is an acceptor** or **forms an** acceptor material in the charge transfer complex ~~depending~~

~~upon respectively whether~~ **if** the semiconductor ~~itself~~ is **a** ~~an acceptor or~~ donor material.

2. (previously presented) A device according to claim 1, wherein the bond to the surface of the substrate is a chemical or electrostatic bond or a combination thereof.

3. (previously presented) A device according to claim 1, wherein the charge transfer material is an organic compound.

4. (previously presented) A device according to claim 1, wherein the organic compound comprises a functional group which forms the bond to the surface of the substrate.

5. (previously presented) A device according to claim 4, wherein the functional group is material selective and forms the bond to a specific substrate material.

6. (previously presented) A device according to claim 1, wherein the charge transfer material is provided at the surface of the substrate and the device further comprises a connection layer without charge transfer components provided between the surface of the substrate and the charge transfer material, wherein the connection layer forms a bond to the

surface of the substrate and a bond to the charge transfer material.

7. (previously presented) A device according to claim 6, wherein the bonds of the connection layer each is a chemical or electrostatic bond or a combination thereof.

8. (previously presented) A device according to claim 6, wherein the connection layer is formed of an organic bonding agent.

9. (previously presented) A device according to claim 8, wherein the organic bonding agent is formed of DNA molecules, such that the one half strand of a DNA molecule is bonded to the surface of a substrate and the complementary second half strand of the DNA molecule is bonded to the charge transfer material.

10. (previously presented) A device according to claim 1, wherein the charge transfer material is an atomic or molecular inorganic compound.

11. (previously presented) A device according to claim 10, wherein the charge transfer inorganic compound is provided on the surface of the substrate and is formed of a material which reacts chemically with the substrate and which

forms a connection layer consisting of a chemical compound of the substrate material and the inorganic compound between the substrate and the inorganic compound.

12. (previously presented) A device according to claim 10, wherein the charge transfer inorganic compound is provided at the surface of the substrate and the device further comprises a connection layer provided between the substrate and the inorganic compound, wherein the connection layer comprises a chemical compound of the substrate material or a material with similar chemical properties, and the charge transfer inorganic compound.

13. (previously presented) A method for fabricating a device of claim 1 which comprises

providing a charge transfer material as a patterned or unpatterned self-assembling layer of one or more atomic or molecular layers on or at a surface of the substrate, wherein the charge transfer material includes charge transfer components in the form of donors and/or acceptors,

forming a direct or indirect bond between the charge transfer material and the surface of the substrate,

and forming a charge transfer complex of the charge transfer material together with a thereabove adjacently provided organic or inorganic semiconductor, wherein the charge transfer material forms a donor or acceptor material

in the charge transfer complex depending upon respectively whether the semiconductor itself is an acceptor or donor material.

14. (previously presented) A method according to claim 13, which further comprises forming the bond as a chemical or electrostatic bond or a combination thereof.

15. (previously presented) A method according to claim 13, which further comprises selecting the charge transfer material as an organic compound.

16. (previously presented) A method according to claim 15, which further comprises selecting the organic compound with a functional group which forms the bond to the surface of the substrate.

17. (previously presented) A method according to claim 16, which further comprises selecting the functional group as a material-selective group such that the bond is formed to a specific substrate material.

18. (previously presented) A method according to claim 13, wherein the charge transfer material is provided at the surface of the substrate, and which further comprises providing a connection layer without charge transfer

components between the surface of the substrate and the charge transfer material, and forming the connection layer with a bond to the surface of the substrate and with a bond to the charge transfer material.

19. (previously presented) A method according to claim 18, which further comprises forming each bond in the connection layer as a chemical or electrostatic bond or a combination thereof.

20. (previously presented) A method according to claim 18, which further comprises forming the connection layer of an organic bonding agent.

21. (previously presented) A method according to claim 20, which further comprises forming the organic bonding agent of DNA molecules, such that the one half strand of a DNA molecule is bond to the surface of the substrate and the complementary second half strand of the DNA molecule is bond to the charge transfer material.

22. (previously presented) A method according to claim 13, which further comprises selecting the charge transfer material as an atomic or molecular inorganic compound.

23. (previously presented) A method according to claim 22, wherein the charge transfer inorganic compound is provided on the surface of the substrate, and which further comprises forming the inorganic compound of a material which reacts chemically with the substrate such that between the substrate and the inorganic compound a connection layer consisting of a chemical compound of the substrate material and the inorganic compound is formed.

24. (previously presented) A method according to claim 22, wherein the charge transfer inorganic compound is provided at the surface of the substrate, and which further comprises providing a connection layer consisting of a compound of the substrate material or a material with similar chemical properties, and the inorganic compound, between the substrate and the inorganic compound.

25. (currently amended) A device for electrical contacting or for the isolation of organic or inorganic semiconductors in electronic or optoelectric devices comprising

a substrate, either in the form of

a) a contact material consisting of an organic or inorganic electrical conductor, or

b) an isolating material consisting of an organic or inorganic dielectric; and

a patterned or unpatterned charge transfer material**, which is** on or at a surface of the substrate **and which forms a charge transfer complex with an organic or inorganic semiconductor,**

wherein the charge transfer material

a) comprises charge transfer components in the form of donors or acceptors,

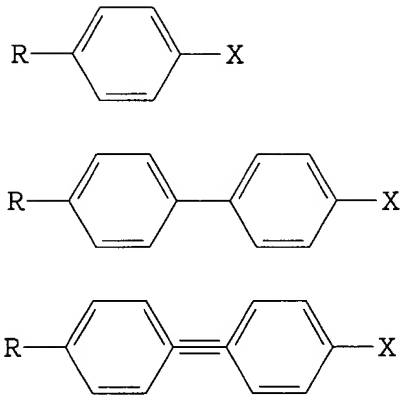
b) forms a self-assembling layer of one or more atomic or molecular layers,

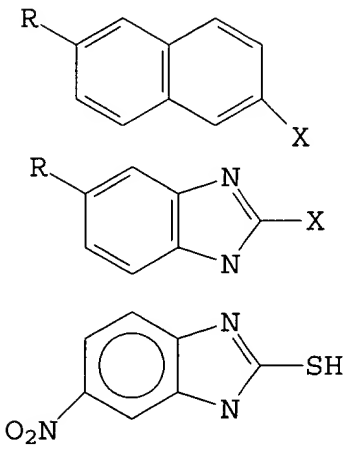
c) has a direct or indirect bond to the surface of the substrate,

~~d) forms a charge transfer complex with an organic or inorganic semiconductor, wherein the charge transfer material~~

d) forms a donor **material in the charge transfer complex if the semiconductor is an acceptor** or **forms an** acceptor material in the charge transfer complex ~~depending upon respectively whether~~ **if** the semiconductor ~~itself~~ is **a** ~~an acceptor or~~ donor material, and

e) is made from inorganic charge transfer compound or an organic charge transfer compound selected from the group consisting of





wherein R is F, Cl or NO_2 and X is -NC or SH.